

## THE GENUS *ERIOGONUM* MICHX. (POLYGONACEAE) AND MICHEL GANDOGER

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**ABSTRACT.**— Michel Gandoger, a notorious “splitter,” proposed several new entities in the plant genus *Eriogonum* (Polygonaceae) in a 1906 paper published in Belgium. Because he used the term *species* at two different ranks, in violation of the International Code of Botanical Nomenclature, many of his names are invalid. Unlike his papers published in France, this one was apparently edited so that some names were validly published and some are invalid. A review of the 1906 *Eriogonum* paper shows that a majority of both specific and infraspecific entities proposed are valid, but some names, long in use and assumed to be valid, are, in fact, invalid. Even so, most of his names are synonyms. Each name proposed by Gandoger is reviewed and a nomenclatural and taxonomic disposition made. Two new combinations are made within *E. luteolum* Greene, var. *caninum* (Greene) Reveal and var. *pedunculatum* (S. Stokes) Reveal.

Michel Gandoger (1850–1926), in the words of Keck (1958), was a “French abbé; author of ‘Flora Europae’ (27 vols.); voluminous writer; amasser of a huge herbarium now at Lyon; a ‘splitter’ who named thousands of unacceptable species.” Gandoger is also mentioned in the International Code of Botanical Nomenclature (Stafleu et al. 1978) as an example of Art. 33.4. This article deals with the problem of misplaced ranks such as the use of the term *species* as a rank within a species. As noted in the code, Gandoger applied the term *species* and used binary nomenclature for two categories of taxa of consecutive rank, the higher rank being equivalent to that of species in contemporary literature, while he misapplied the same term to a lower rank. These latter terms are not validly published. In his 1906 paper, Gandoger used three sets of ranks, the species, species of the second order (“speciebus secundi ordinis”), and a rank which has come to be identified with the rank of variety (Heller 1907), although Gandoger causally refers to this latter rank as forms (“formis,” “formas secernendas,” “formae memorabiles,” “memorantur sequentes formae,” “varieas formas,” “modo formae,” etc.). He used the terms “varians” and “variabilis” to allude to the same category. As for the species of the sec-

ond order, in addition to terming them “speciebus secundi ordinis,” he also used the term *subspeciebus* or *subspecies* to refer to entities he then proceeded to treat as binomials and to designate by the expression *sp. n.*

The following year, Heller (1907) presented a “compilation” of the Gandoger paper, noting that he was presenting only “the new forms described in this paper.” Heller himself had some difficulties with the names. He mentioned, after *Eriogonum aspalathoides* (as it was called by Heller), that this name was “perhaps intended as a variety of *E. fasciculatum*, but the way the name is printed should indicate a species.” Only once does Heller include Gandoger’s terminology alluding to species of a lower rank, this being for the phrases published under *E. sphaerocephalum*, “Inter formas varias duae sequentes, ut subspecies, praecipue distingui possunt.”

It must be noted that Heller was merely presenting Gandoger’s results, and he cannot be assumed to have validated any of the otherwise invalid Gandoger names.

Normally, Gandoger published his papers in the *Bulletin de la Société Botanique de France*, but for *Eriogonum* his choice was the *Bulletin de la Société Royale de Botanique de Belgique*, and, because of this, some of the names may be validly described. Possibly

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they may because of the way the editor had the paper set, thereby removing from the original manuscript some of Gandoger's eccentricities. In reviewing Gandoger's papers in the French journal, it is clear that the majority of his names are invalidly published. In reviewing a few of his articles containing species from the United States, I failed to note a single instance when a species name was validly published. This little known fact, at least in the United States and perhaps elsewhere, means that all the Gandoger names must be carefully checked before they can be accepted. This is particularly true for floristic workers.

Finally, it is sometimes difficult to know exactly where the various sections of Gandoger's paper start and end so that one can determine if the name is validly published or, in fact, is not because of a sentence presented several pages before. I have tried to follow the intent of Gandoger's paper, and hope I have interpreted each segment correctly.

The following treatment indicates which names are valid, which are not, and the taxonomic status of each name. The full author citation of each name is given, and the number following the name is the page on which it was proposed by Gandoger.

*Eriogonum abertianum* Torr. in Emory var. *ruberrimum* Gandoger, 185, valid, a synonym of var. *abertianum*.

*Eriogonum abertianum* var. *neomexicanum* Gandoger, 185, valid, a synonym of var. *abertianum*.

*Eriogonum arizonicum* Gandoger, non Stokes ex Jones, 186, valid, a synonym of *E. pharnaceoides* Torr. in Emory var. *pharnaceoides*.

*Eriogonum alatum* Torr. in Sitgr. var. *macdouglasii* Gandoger, 186, valid, a synonym of var. *mogollonense* Stokes ex Jones.

*Eriogonum alatum* var. *brevifolium* Gandoger, 186, valid, a synonym of var. *alatum*.

*Eriogonum anemophilum* (as *anemophyllum*) Greene var. *cusickii* Gandoger, 186, valid, a synonym of *E. cusickii* M. E. Jones.

*Eriogonum angulosum* Benth. var. *rectipes* Gandoger, 186, valid, a synonym of *E. maculatum* Heller.

*Eriogonum angulosum* var. *patens* Gandoger, 187, valid, a synonym of *E. maculatum* Heller.

*Eriogonum angulosum* var. *pauciflorum* Gandoger, 187, valid, a synonym of *E. maculatum* Heller.

*Eriogonum angulosum* var. *flabellatum* Gandoger, 187, valid, a synonym of *E. maculatum* Heller.

*Eriogonum annuum* Nutt. var. *pauciflorum* Gandoger, 187, valid, a synonym of *E. annuum*.

*Eriogonum hitchcockii* Gandoger, 187, valid, a synonym of *E. annuum*.

*Eriogonum juncinellum* Gandoger, 187, valid, a synonym of *E. davidsonii* Greene.

*Eriogonum salicorniodes* Gandoger, 187, valid, a good species restricted to clay slopes in southwestern Idaho and adjacent southwestern Oregon. It is most closely related to *E. collinum* Stokes ex Jones but most often confused with *E. baileyi* S. Wats. Synonyms of this species include *E. demissum* S. Stokes (1936) and the var. *romanum* S. Stokes.

*Eriogonum caespitosum* Nutt. var. *alysoides* Gandoger, 188, valid, a synonym of *E. caespitosum*.

*Eriogonum nevadense* Gandoger, 188, valid, a synonym of *E. ochrocephalum* S. Wats. var. *ochrocephalum*.

*Eriogonum elatum* Dougl. ex Benth. var. *limonifolium* Gandoger, 188, valid, a synonym of *E. elatum* var. *elatum*.

*Eriogonum elatum* var. *erianthum* Gandoger, 188, valid, a synonym of var. *elatum*.

*Eriogonum fasciculatum* Benth. var. *oleifolium* Gandoger, 189, valid, a synonym of *E. fasciculatum* var. *fasciculatum*.

*Eriogonum fasciculatum* Benth. var. *aspalathoides* Gandoger, 189, valid, a synonym of var. *fasciculatum*. As noted by Heller (1907), there is some problem with this name; that is, there is an *E.* prior to the epithet. However, based upon the rest of the text, this is clearly a printer's error and should be listed as a variety and not as a species, as was done by Heller in his "compilation."

*Eriogonum flavum* Nutt. in Fras. var. *foliatum* Gandoger, 189, valid, a synonym of *E. jamesii* Benth. in DC. var. *flavescens* S. Wats.

*Eriogonum flavum* var. *linguifolium* Gandoger, 189, valid, a synonym of var. *flavum*.

*Eriogonum leucocladum* Gandoger, 189, valid, a synonym of *E. baileyi* S. Wats. var. *divaricatum* (Gandoger) Reveal.

*Eriogonum heracleoides* Nutt. var. *micran-*

*thum* Gandoger, 189, valid, a synonym of *E. heracleoides* var. *angustifolium* (Nutt.) Torr. & Gray.

*Eriogonum heracleoides* var. *viride* Gandoger, 190, valid, a synonym of *E. umbellatum* Torr. var. *nevadense* Gandoger.

*Eriogonum heracleoides* var. *multiceps* Gandoger, 190, valid, a synonym of var. *heracleoides*.

*Eriogonum heracleoides* var. *utahensis* Gandoger, 190, valid, a synonym of var. *heracleoides*.

*Eriogonum heracleoides* var. *rydbergii* Gandoger, 190, valid, a synonym of var. *heracleoides*.

*Eriogonum jamesii* Benth. in DC. var. *simplex* Gandoger, 190, valid, a good variety often included within var. *jamesii*; this phase of the species is restricted to southwestern Kansas.

*Eriogonum jamesii* var. *neomexicanum* Gandoger, 190, valid, a synonym of var. *jamesii*.

*Eriogonum longifolium* Nutt. var. *longidens* Gandoger, 190, valid, a synonym of *E. longifolium* var. *gnaphalifolium* Gandoger.

*Eriogonum longifolium* var. *gnaphalifolium* Gandoger, 190, valid, that phase of the species restricted to Florida; often called *E. floridanum* Small.

*Eriogonum longifolium* var. *floridanum* (as *floridana*) Gandoger, 190, valid, a synonym of *E. longifolium* var. *gnaphalifolium* Gandoger.

*Eriogonum longifolium* var. *lindheimeri* Gandoger, 190, valid, the western phase of the species now best considered a synonym of var. *longifolium*.

*Eriogonum longifolium* var. *caput-felis* Gandoger, 190, valid, a synonym of var. *longifolium*.

Under the heading, *Eriogonum microthecum* Nutt., Gandoger states "inter quas sequentes altum pro subspeciebus habueris" and refers to the following six entities all published with binary names.

*Eriogonum macdougalii* Gandoger, 191, invalid, a synonym of *E. microthecum* Nutt. var. *foliosum* (Torr. & Gray) Reveal. The name was used by Stokes (1936) at the variatal rank within *E. microthecum*, where she validated the name as *E. microthecum* var. *macdougalii* S. Stokes.

*Eriogonum myrianthum* Gandoger, 191, invalid, a synonym of *E. effusum* Nutt. var. *effusum*.

*Eriogonum spathulare* Gandoger, 191, invalid, a synonym of *E. microthecum* Nutt. var. *laxiflorum* Hook. The name was used by Stokes (1936) at the variatal rank within *E. microthecum*, where she validated the name as *E. microthecum* var. *spathulare* S. Stokes.

*Eriogonum intricatum* Gandoger, 191, invalid, a synonym of *E. microthecum* Nutt. var. *laxiflorum* Hook.

*Eriogonum helichrysoides* Gandoger, 192, invalid, a synonym of *E. effusum* Nutt. var. *rosmarinioides* Benth. in DC. The name was validly published by Rydberg (1931) and the citation of the name should be *E. helichrysoides* Rydb., Brittonia 1: 87. 1931, without reference to Gandoger. Rydberg was incorrect that Gandoger had proposed a variety, so the combination attributed to Gandoger by Rydberg in synonymy, *E. microthecum* var. *helichrysoides*, must be attributed to Rydberg as well.

*Eriogonum sarothriforne* Gandoger, 192, invalid. The type of this name, collected by Osterhout at Glenwood Springs, Garfield Co., Colorado, may represent a distinct taxon. It belongs to the *E. brevicaule* Nutt. complex and is seemingly a part of the polymorphic species *E. lonchophyllum* Torr. & Gray, a taxon that morphologically bridges the *E. brevicaule* complex, a group of herbaceous perennials, with those species typified by *E. corymbosum* Benth. in DC., a series of shrubs or subshrubs. The Garfield Co. plants tend to be more slender than typical *E. lonchophyllum* of southern Colorado and adjacent northern New Mexico. These plants also tend to resemble some of the more robust, but yellow-flowered, forms of *E. brevicaule* found in Rio Blanco Co., Colorado. Although well known to me, I am still uncertain what to do with the Glenwood Springs plants.

*Eriogonum niveum* Dougl. ex Benth. var. *suksdorfii* Gandoger, 192, valid, a synonym of *E. niveum*.

*Eriogonum niveum* var. *candelabrum* Gandoger, 192, valid, a synonym of *E. niveum*.

*Eriogonum ochroleucum* Small var. *macropodum* Gandoger, 192, valid, the basionym for *E. ovalifolium* Nutt. var. *macropodum* (Gandoger) Reveal.

*Eriogonum ochroleucum* var. *decalvans* Gandoger, 192, valid, a synonym of *E. ovalifolium* Nutt. var. *macropodum* (Gandoger) Reveal.

Under the heading of *Eriogonum ovalifolium* Nutt., Gandoger proposed a series of names in two ranks, all of which he refers to by "formas quarum non paucas saltem pro speciebus secundi ordinis haberi possunt," which I believe he wished to apply only to those names he indicated by the designation of *sp. n.*

*Eriogonum flavissimum* Gandoger, 193, invalid, a synonym of *E. ovalifolium* Nutt. var. *anserinum* (Greene) R. J. Davis. The name was used by Stokes (1936) as a subspecies of *E. ovalifolium*, where the name was validated as *E. ovalifolium* Nutt. ssp. *anserinum* S. Stokes.

*Eriogonum cusickii* Gandoger, non M. E. Jones (1903), 193, invalid, a synonym of *E. strictum* var. *proliferum* (Torr. & Gray) Reveal. The name was used at the variatal rank by Stokes (1936) within *E. strictum*, where the name was validated as *E. strictum* Benth. var. *cusickii* S. Stokes.

*Eriogonum cusickii* Gandoger var. *californicum* Gandoger, 193, invalid, a synonym of *E. strictum* var. *proliferum* (Torr. & Gray) Reveal.

*Eriogonum ovalifolium* Nutt. var. *nevadense* Gandoger, 193, valid, a good variety of the species, this being the yellow-flowered, early flowering expression which I have called var. *multiscapum* Gandoger (see below).

*Eriogonum ovalifolium* var. *deltoideum* Gandoger, valid, 193, a synonym of *E. ovalifolium* var. *nevadense* Gandoger.

*Eriogonum dichroanthum* Gandoger, 193, invalid, a synonym of *E. ovalifolium* Nutt. var. *nevadense* Gandoger (see discussion under var. *multiscapum* below).

*Eriogonum ovalifolium* Nutt. var. *utahense* Gandoger, 194, valid, a synonym of var. *ovalifolium*.

*Eriogonum ovalifolium* Nutt. var. *multiscapum* Gandoger, 194, valid, a synonym of var. *ovalifolium*. For several years I have misapplied this name to the yellow-flowered phase of the species (Reveal & Munz 1968, Reveal 1973, 1976). Gandoger based this name on plants gathered by Nelson (4656) at

Cokeville, Uinta Co., Wyoming, upon which he also based the name *E. dichroanthum*. An examination of this collection by me in 1966, and then by my brother, Jon A. Reveal, in 1973, was inconclusive in that it could not be fully determined if the flowers of var. *multiscapum* were truly yellow. Gandoger divided the collection and mounted each on a separate sheet, with *E. dichroanthum* having "flores fructusque flavissimi," and the flowers of var. *multiscapum*, to him, were "ochroleuci." The same collection at KSC is strictly yellow flowered, but the specimen at RM is a mixture of a bright-yellowed specimens matching *E. dichroanthum* and a whitish or, at best, pale yellow-flowered specimen that matches var. *multiscapum*. I now believe that the yellow-flowered, early spring flowering phase of the species should be called var. *nevadense* and the type of var. *multiscapum* assigned to var. *ovalifolium*.

*Eriogonum ovalifolium* Nutt. var. *cyclophyllum* Gandoger, 194, valid, a synonym of var. *macropodum* (Gandoger) Reveal. A reexamination of the types of var. *cyclophyllum* and var. *cerastoides* (see below), as part of this study, clearly shows that these names must be referred to what I (Reveal 1968) had earlier called var. *macropodum*, making a new combination for this name by transferring it from *E. ochroleucum* Small to *E. ovalifolium*. Previously, these two names have been referred to var. *ovalifolium* (Hitchcock 1964). The var. *cyclophyllum* is close to var. *ovalifolium* and may represent one of the many intermediate expressions between the two varieties. I retain the usage of var. *macropodum*.

*Eriogonum ovalifolium* Nutt. var. *cerastoides* Gandoger, 194, valid, a synonym of var. *macropodum* (Gandoger) Reveal (see the discussion above).

*Eriogonum rubidum* Gandoger, 194, invalid, a synonym of *E. ovalifolium* Nutt. var. *depressum* Blankinship.

*Eriogonum rubidum* var. *frigidum* Gandoger, 194, invalid, a synonym of *E. ovalifolium* Nutt. var. *depressum* Blankinship.

*Eriogonum roseiflorum* Gandoger, 194, invalid, a synonym of *E. ovalifolium* Nutt. var. *ovalifolium*.

*Eriogonum piperi* Greene var. *ochrocephalum* Gandoger, 195, valid, a synonym of *E.*



*flavum* Nutt. in Fras. var. *piperi* (Greene) M. E. Jones.

*Eriogonum piperi* var. *longiflorum* Gandoger, 195, valid, a synonym of *E. flavum* Nutt. in Fras. var. *piperi* (Greene) M. E. Jones.

Under *Eriogonum polyanthum* Benth., now better known as *E. umbellatum* Torr. var. *polyanthum* (Benth. in DC.) M. E. Jones, Gandoger introduces two validly described species simply stating that "species duae sequentes huic sunt affines."

*Eriogonum marginale* Gandoger, 195, valid, a synonym of *E. umbellatum* Torr. var. *aureum* (Gandoger) Reveal.

*Eriogonum glaberrimum* Gandoger, 195, valid, the basionym of *E. umbellatum* Torr. var. *glaberrimum* (Gandoger) Reveal.

*Eriogonum glaberrimum* var. *aureum* Gandoger, 195, valid, the basionym of *E. umbellatum* Torr. var. *aureum* (Gandoger) Reveal.

*Eriogonum polycladon* Benth. var. *mexicanum* Gandoger, 196, valid, a synonym of *E. polycladon*.

*Eriogonum polycladon* Benth. var. *crispum* Gandoger, 196, valid, a synonym of *E. polycladon*.

*Eriogonum racemosum* Nutt. var. *sagittatum* Gandoger, 196, valid, a synonym of *E. racemosum*.

*Eriogonum racemosum* Nutt. var. *cordifolium* Gandoger, 196, valid, a synonym of *E. racemosum*.

*Eriogonum reniforme* Torr. & Frém. var. *asarifolium* Gandoger, 196, valid, a synonym of *E. pusillum* Torr. & Gray.

*Eriogonum praebens* Gandoger, 196, valid, a synonym of *E. baileyi* S. Wats. var. *divaricatum* (Gandoger) Reveal.

*Eriogonum praebens* var. *divaricatum* Gandoger, 196, valid, the basionym of *E. baileyi* S. Wats. var. *divaricatum* (Gandoger) Reveal.

Under the heading *Eriogonum sphaerocephalum* Dougl. ex Benth., Gandoger states "inter formas varias duae sequentes, ut sub-species, praecipue distingui possunt."

*Eriogonum cupreum* Gandoger, 196, invalid, a synonym of *E. umbellatum* Torr. var. *umbellatum*.

*Eriogonum halimioides* Gandoger, 197, invalid. This name was validated by Stokes (1936) as *E. sphaerocephalum* var. *hali-*

*mioides* S. Stokes without reference to Gandoger.

*Eriogonum subalpinum* Greene var. *arachnoideum* Gandoger, 197, valid, a synonym of *E. umbellatum* Torr. var. *dichrocephalum* Gandoger.

*Eriogonum subalpinum* var. *vulcanicum* Gandoger, 197, valid, a synonymy of *E. umbellatum* Torr. var. *majus* Hook.

*Eriogonum subalpinum* var. *stenophyllum* Gandoger, 197, valid, a synonym of *E. umbellatum* Torr. var. *majus* Hook.

*Eriogonum subalpinum* var. *subnivale* Gandoger, 197, valid, a synonym of *E. umbellatum* Torr. var. *majus* Hook.

*Eriogonum tenellum* Torr. var. *grandiflorum* Gandoger, 197, valid, a synonym of *E. microthecum* Nutt. var. *laxiflorum* Hook.

*Eriogonum tenellum* var. *sessiiflorum* Gandoger, 198, valid, a synonym of *E. microthecum* Nutt. var. *laxiflorum* Hook.

*Eriogonum tenellum* var. *erianthum* Gandoger, 198, valid, a synonym of *E. microthecum* Nutt. var. *ambiguum* (M. E. Jones) Reveal in Munz.

*Eriogonum thurberi* Torr. var. *parishii* Gandoger, 198, valid, a synonym of *E. thurberi*.

*Eriogonum thurberi* var. *acutangulum* Gandoger, 198, valid, a synonym of *E. maculatum* Heller.

*Eriogonum thymoides* Benth. in DC. var. *pallens* Gandoger, 198, valid, a synonym of *E. thymoides*.

*Eriogonum umbellatum* Torr. var. *crandallii* Gandoger, 198, valid, a synonym of var. *umbellatum*.

*Eriogonum umbellatum* var. *chrysanthum* Gandoger, 198, valid, a synonym of *E. umbellatum* var. *stellatum* (Benth.) M. E. Jones.

*Eriogonum umbellatum* var. *nevadense* Gandoger, 198, valid, a good variety referring to that phase of the species found in the Sierra Nevada of California northward into Oregon and eastward into western Nevada that has been routinely called var. *umbellatum* (Reveal & Munz 1968; see Howell 1976).

*Eriogonum umbellatum* var. *cladophorum* Gandoger, 198, valid, a synonym of var. *umbellatum*.

*Eriogonum umbellatum* var. *dichrocephalum* Gandoger, 199, valid, a good variety applied to that phase previously called *E.*

*umbellatum* var. *aridum* (Greene) C. L. Hitchc. (Hitchcock 1964).

*Eriogonum umbellatum* var. *californicum* Gandoger, 199, valid, a synonym of *E. umbellatum* var. *nevadense* Gandoger.

*Eriogonum vimineum* Dougl. ex Benth. var. *rigescens* Gandoger, 199, valid, a synonym of *E. vimineum*.

*Eriogonum vimineum* Dougl. ex Benth. var. *californicum* Gandoger, 199, valid, a synonym of *E. luteolum* Greene var. *caninum* (Greene) Reveal, comb. nov., based on *E. vimineum* var. *caninum* Greene, Fl. Francisc. 150. 1891. The type of var. *californicum* is somewhat intermediate between var. *luteolum* and var. *caninum*, being closer to the latter than the former. I have long recognized the *caninum* phase (Reveal & Munz 1968) as distinct from *E. vimineum*, but J. T. Howell, who has considered the expression only as a variant, has pointed out in our conversation that he had observed a large series of intermediate populations, as had I, which held the Mt. Tamalpais plant, var. *caninum*, well within the boundaries of what he called *E. vimineum*. This latter expression, however, proved to be *E. luteolum* rather than *E. vimineum*, and I am now following Howell's (1970) taxonomic disposition of this local endemic. In addition to this variant of *E. luteolum*, the Sierra Nevada plant I recognized as a distinct species previously (Reveal 1970) should be included within this species as well. Thus, I propose *E. luteolum* var. *pedunculatum* (S. Stokes) Reveal, stat. & comb. nov.,

based on *E. pedunculatum* S. Stokes, Leaf. W. Bot. 2: 48. 1937.

*Eriogonum vimineum* var. *oregonense* Gandoger, 199, valid, a synonym of *E. vimineum*.

*Eriogonum restioioides* Gandoger, 199, valid, a synonym of *E. baileyi* S. Wats. var. *baileyi*.

#### LITERATURE CITED

- GANDOGER, M. 1906. Le genre *Eriogonum* (Polygonaceae). Bull. Soc. Roy. Bot. Belgique 42: 183-200.
- HELLER, A. A. 1907. Compilations. Muhlenbergia 3: 83-96.
- HITCHCOCK, C. L. 1964. *Eriogonum*. Univ. Wash. Publ. Biol. 17(2): 104-138.
- HOWELL, J. T. 1970. Marin flora. 2d ed. Berkeley: Univ. California Press. 366 pp.
- . 1976. *Eriogonum* notes VII. *Mentzelia* 1: 17-22.
- KECK, D. D. 1959. "Abbreviations of authors' names." Pages 1551-1576 in P. A. Munz, & D. D. Keck, eds. A California flora. Berkeley: Univ. California Press.
- REVEAL, J. L. 1968. Some nomenclatural changes in *Eriogonum* (Polygonaceae). *Taxon* 17: 531-533.
- . 1973. *Eriogonum* (Polygonaceae) of Utah. *Phytologia* 25: 169-217.
- . 1976. *Eriogonum* (Polygonaceae) of Arizona and New Mexico. *Phytologia* 34: 409-484.
- REVEAL, J. L., AND P. A. MUNZ. 1968. "*Eriogonum*." Pages 33-72 in P. A. Munz, ed. Supplement to A California flora. Berkeley: Univ. California Press.
- RYDBERG, P. A. 1931. Taxonomic notes on the flora of the prairies and plains of central North America. *Brittonia* 1: 79-104.
- STAFLEU, F. A., ET AL. 1978. International code of botanical nomenclature. *Regnum Veg.* 97: 1-457.
- STOKES, S. G. 1936. The genus *Eriogonum*, a preliminary study based on geographic distribution. San Francisco: J. B. Neblett. 124 pp.